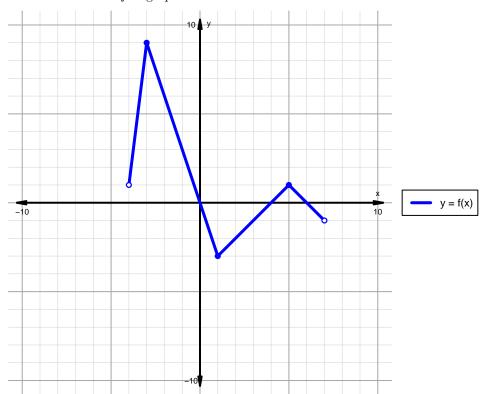
## Intervals, Transformations, and Slope Practice (version 11)

1. The function f is graphed below.

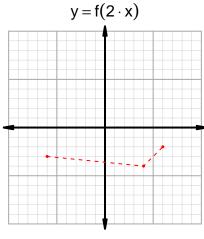


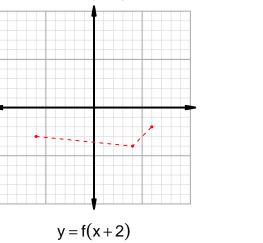
Indicate the following intervals using interval notation. Remember, you can use  $\cup$  between two intervals to indicate the union. Except for range, all intervals will indicate x values; this is standard.

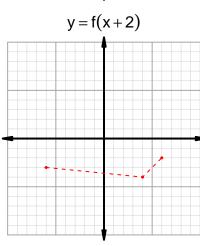
| Feature    | Where |
|------------|-------|
| Positive   |       |
|            |       |
| Negative   |       |
|            |       |
| Increasing |       |
|            |       |
| Decreasing |       |
|            |       |
| Domain     |       |
|            |       |
| Range      |       |
|            |       |
|            |       |

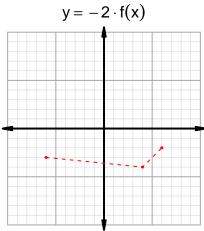
## Intervals, Transformations, and Slope Practice (version 11)

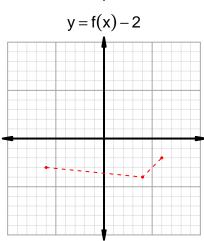
2. In the four graphs below, y = f(x) is graphed as a dotted line. With a solid line, please graph the transformations indicated by the equations below.











3. Let function g be defined by the table below. Use the formula  $\frac{g(x_2)-g(x_1)}{x_2-x_1}$  to find the average rate of change between  $x_1=39$  and  $x_2=79$ . Express your answer as a reduced fraction.

| x  | g(x) |
|----|------|
| 4  | 39   |
| 29 | 79   |
| 39 | 29   |
| 79 | 4    |
|    |      |